

WHAT IS CLAIMED IS:

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1. An audio system, comprising:
a cabinet having an opening in a first wall thereof;
a first speaker for emitting audio output, said first speaker being mounted
inversely at said opening of said cabinet; and
a sensor for sensing pressure caused by the audio output from said first speaker,
said sensor being mounted in said cabinet by a sensor mounting structure joined to said
cabinet.
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2. The audio system of claim 1, wherein said audio system comprises a low
frequency audio system.
3. The audio system of claim 1, wherein said sensor comprises a second speaker.
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4. The audio system of claim 1, wherein said sensor mounting structure comprises
a damped elastic mounting structure.
5. The audio system of claim 1, wherein said sensor mounting structure comprises
20 an enclosure mounted on said first wall and including said opening in said first wall.
6. The audio system of claim 1, further comprising a means for adjusting the audio
output of said first speaker based on said pressure sensed by said sensor.

7. The audio system of claim 1, wherein said first speaker has a speaker maximum width and said sensor has a sensor maximum width, and said sensor maximum width is smaller than said speaker maximum width.

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8. The audio system of claim 1, wherein said sensor has a signal-to-noise ratio of at least of 100 dB.

9. The audio system of claim 1, wherein said audio system has a feedback factor of 30 to 50 dB when said first speaker operates at a frequency of about 15 to 300 Hz.

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10. The audio system of claim 1, further comprising acoustic absorbing material contained in said cabinet.

11. The audio system of claim 1, further comprising a passive radiator mounted in said cabinet.

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12. The audio system of claim 1, wherein said first speaker comprises an electrodynamic planar speaker.

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13. The audio system of claim 1, wherein said first speaker comprises an electrostatic planar speaker.

14. A method for improving acoustical accuracy in an audio system comprising the steps of:

mounting a first speaker inversely in an opening of a wall of a cabinet;

sensing pressure from audio output from the first speaker; and

5 adjusting the audio output from the first speaker based on the pressure sensed in said sensing step.

15. The method of claim 14, wherein the audio system comprises a low frequency audio system.

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16. The method of claim 14, wherein the sensor comprises a second speaker.

17. The method of claim 14, wherein said sensing step is performed by a sensor having a signal-to-noise ratio of at least of 100 dB.

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18. The method of claim 14, wherein said method produces an audio system feedback factor of 30 to 50 dB when the first speaker operates at a frequency of about 15 to 300 Hz.

Sub 20 19. The audio system of claim 14, wherein said first speaker comprises an electrodynamic planar speaker.

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B1

20. The audio system of claim 14, wherein said first speaker comprises an electrostatic planar speaker.

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B2

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C3

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E3